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NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptomail1@bakerbotts.com
glenda.orrantia@bakerbotts.com

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-9,11-21,23-28,30 and 31* is/are rejected.

7)☒ Claim(s) *4,10,22 and 29* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/18/08*.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 17 January 2008 have been fully considered but they are not

persuasive. Applicant asserts that the amendments to claims 5, 17, and 29 have overcome the 35

U.S.C. 112, second paragraph, rejections. Response, p. 15. Examiner submits that claims 5 and

17 continue to be vague and indefinite, such that Examiner has maintained the 35 U.S.C. 112,

second paragraph, rejections with respect to these claims.

2.   Applicant also asserts that the 35 U.S.C. 112, second paragraph, rejection of claims 15

and 27 is improper because "it is improper to interpret steps occurring in a certain order unless

the language of the method claims impose such a restriction". Response, p. 15 (citing to MPEP

2111.01). Examiner respectfully disagrees that the rejection is improper. Examiner notes that

the *Interactive Gift* test is used to determine whether the steps of a method claim must be

performed in the recited order. *Altris Inc. v. Symantec Corp.,* 65 USPQ2d 1865, 1869 (Fed. Cir.

2003). The *Interactive Gift* test is a two-part test that looks to (1) whether "'as a matter of logic

or grammar'" the claim language requires the steps to be performed in the recited order and (2) if

not, "whether the rest of the specification . . . 'directly or implicitly requires such a narrow

construction.'" *Id.* (citing to *Interactive Gift Express, Inc. v. CompuServe Inc.* 256 F.36 1323,

1343, 59 USPQ2d 1401, 1416 (Fed. Cir. 2000)). Examiner submits that claims 15 and 27 meet

prong (1). In addition, Examiner submits that even if claims 15 and 27 do not meet prong (1),

they meet prong (2).

3.   Claims 15 and 27 recite: "transmitting a plurality of parameters comprises consecutively

transmitting the plurality of parameters, each parameter transmitted after establishing a

corresponding one of the connections" (or its equivalent). Claims 6 and 18, which claims 15 and

27 depend upon, respectively, recite: "transmitting a plurality of parameters" and "establishing a

plurality of digital subscriber line connections with the communications device, each connection

corresponding with a particular one of the parameters". By having the "establishing" step recite

that "each connection correspond[s] with a particular one of the parameters", the "establishing"

step implies that the "transmitting" step occurs before the "establishing" step because otherwise

the device will not know whether each connection corresponds with a particular one of the

parameters. Therefore, Examiner submits claims 15 and 27 meet prong (1) of the *Interactive*

Gift test, such that these claims should be read as requiring these steps to be performed in the

recited order.

4.   In addition, these limitations claim the "training" or "train-up" processes referred to in

the Specification "where DSLAM 30 transmits certain parameters associated with DSL chip 54 .

. . to establish a connection." Specification, p. 13, lines 8-15. Since the parameters are required

to establish a connection, the Specification requires that the transmitting step occur before the

establishing step. As such, even if claims 15 and 27 fail prong (1) of the *Interactive Gift* test,

Examiner submits that claims 15 and 27 nonetheless meet prong (2), such that these claims

should be read as requiring the steps to be performed in the recited order.

5.   In light of the foregoing, Examiner maintains that the rejection of claims 15 and 27 under

35 U.S.C. 112, second paragraph, as outlined below, is proper.

6.   Applicant proceeds to assert that "[i]ndependent claim 6 is allowable because *Lund* fails

to disclose, expressly or inherently, 'establishing a plurality of digital subscriber line connections

with the communications device.'" Response, p. 16 (emphasis added by Applicant). Examiner

respectfully disagrees. Lund discloses that "the matching mechanism 440 tests each DSL data link layer protocol listed in the list 140 and monitors the response from the CPE 110." Lund, col. 6, ll. 20-27. Here, Lund discloses that the matching mechanism and the CPE establish a connection for each DSL link layer protocol in order to test the link layer protocol. As such, Examiner maintains that Lund teaches "establishing a plurality of digital subscriber line connections with the communications device."

7.   Applicant also asserts that "monitoring the response is <u>not</u> establishing a connection." Response, p. 16 (emphasis in original). Examiner agrees; however, Examiner submits that monitoring a response demonstrates that a connection for a given protocol has been established.

8.   In view of the foregoing, Examiner maintains that the cited prior art anticipates claims 6, 12, 18, 23, 24, 30, and 31.

9.   Applicant goes on to assert that "Claim 2 is additionally allowable because the applied reference fails to disclose 'each parameter correlated with at least one connection setting and identifying a particular party as a manufacturer of the integrated circuit chip." Response, p. 17. Specifically, Applicant asserts that the cited passage of Applicant's Admitted Prior Art (AAPA) "mentions nothing of a parameter sent from a DSLAM to a device that is correlated with a connection setting." *Id.* At the outset, Examiner notes that this limitation is in claim 1, rather than claim 2, such that Examiner will assume that Applicant is arguing that the rejection of claim 1, rather than the rejection of claim 2, is deficient.

10.   On page 2, line 20-page 3, line 3, Applicant discloses that in the prior art "manufacturer 'A' may design its DSL devices to either identify themselves during the train-up process with a DSLAM as having been manufactured by manufacturer 'B'." Applicant also discloses that

"Manufacturer 'A' may also design its devices so that during the train-up process, the devices merely repeat back the manufacturer identification provided by the DSLAM." *Id.* Thus, Applicant discloses in the prior art that during the train-up process both the DSLAM and the DSL device identify their respective manufacturer. As such, Examiner maintains that AAPA discloses "identifying a particular party as the manufacturer of the integrated circuit chip."

11.   With respect to claim 3, Applicant asserts that "the applied references fail to disclose 'selecting one of the connections having a signal to noise ratio that is within predetermined range.'" Response, p. 17. Specifically, Applicant asserts that Christensen fails to disclose this limitation because "*Christensen* describe[s] monitoring conditions for re-establishment of a connection – not selection from one of a plurality of connections." *Id.* Examiner respectfully disagrees that the cited prior art fails to disclose this limitation. Christensen teaches having a DSLAM monitor the SNR on a connection to determine if the SNR is so poor as to require re-initialization. Col. 3, ll. 21-22. Lund teaches that the "appropriateness of the DSL data link layer protocol to be selected to establish a DSL connection may be determined according to certain criterion" where "[s]uch a criterion may be set up based on application needs." Col. 3, ll. 51-54. Lund also teaches that the "triggering mechanism 430 may activate the matching mechanism 440 on different conditions" such as when the "corresponding physical layer DSL connection is re-established". Col. 5, l. 63-col. 6, l. 6. Thus, Lund teaches re-establishing a link when the physical layer is re-established. Christensen teaches that the connection is re-established when SNR is very poor. The combination teaches that, if a connection has a poor SNR, then the connection should be re-established by performing the matching mechanism of Lund. By extension, the combination teaches "selecting one of the connections having a signal

to noise ratio that is within a predetermined range" because otherwise if a connection is established with too low an SNR then the matching mechanism will immediately begin again to find a new connection which wastes resources. As such, Examiner maintains that the cited prior art discloses "selecting one of the connections having a signal to noise ratio that is within a predetermined range."

12.   With respect to claim 11, Applicant asserts that "the applied references fail to disclose 'selecting the connection having the fastest data transfer rate.'" Response, p. 18. Applicant goes on to assert that "[t]he PTO acknowledges that *Lund* does not disclose this limitation." *Id.* This is incorrect. In the Office Action mailed 10/17/2007, Examiner set forth that "Lund discloses that selecting one of the connections comprises selecting one of the connections having the fastest data transfer rate while having a signal to noise ratio (col. 6, lines 20-27, where a connection that is capable of communication will inherently have the fastest data transfer rate with respect to other connections that are not capable of communication and will inherently have an SNR)." Office Action mailed 10/17/07, p. 13. As such, Examiner maintains that the cited prior art discloses "selecting the connection having the fastest data transfer rate."

13.   With respect to claim 13, Applicant asserts that "the applied references fail to disclose 'selecting one of the connections having a data transfer rate that is equal to or greater than a minimum data transfer rate and a signal to noise ratio that is within zero to nine decibels.'" Response, p. 18. Specifically, Applicant asserts that Examiner has cited "case law concerning ranges" where the "PTO has cited no references which disclose the claimed ranges." *Id.* (citing to MPEP 2144.05). Examiner notes that the portion of the MPEP cited by Applicant is contained in MPEP § 2144.05(I), which is titled "Overlap of Ranges," where none of the cited cases appear

in this section. Rather, some of the cited cases appear in MPEP § 2144.05(II), which is entitled

"Optimization of Ranges." For example, this section provides the following quote from *In re*

Aller, "'[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive

to discover the optimum or workable ranges by routine experimentation.' *In re Aller*, 220 F.2d

454, 456, 105 USPQ 233, 235 (CCPA 1955) (Claimed process which was performed at a

temperature between 40°C and 80°C and an acid concentration between 25% and 70% was held

to be prima facie obvious over a reference process which differed from the claims only in that

the reference process was performed at a temperature of 100°C and an acid concentration of

10%.)". MPEP § 2144.05(II). Here it is noted that Applicant has only discovered the optimum

or workable ranges. As such, Examiner maintains that it would have been obvious to one of

ordinary skill in the art at the time of the invention to "selec[t] one of the connections having a

data transfer rate that is equal to or greater than a minimum data transfer rate and a signal to

noise ratio that is within zero to nine decibels".

14.   Applicant goes on to "challeng[e] the PTO's motivation to combine as conclusory."

Response, p. 18. Examiner respectfully disagrees. Each of the combinations are proper because

in each combination Examiner has clearly articulated why the claimed invention would have

been obvious by setting forth why one of ordinary skill in the art at the time of the invention

would have been motivated to make the combination. *See Examination Guidelines for*

Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in KSR

International Co. v. Teleflex Inc., 72 Fed. Reg. 57526, 57534 (Oct. 10, 2007) (internal citations

omitted).

15.   While Applicant proceeds to discuss the case law pertaining to 35 U.S.C. 103, Applicant

never alleges which motivation Applicant considers to be conclusory, or how Applicant

considers specific rationales to be deficient in light of the case law. Absent such specifics,

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general

allegation that the claims define a patentable invention. If Applicant provides such specifics in

the future, then Examiner will address the proffered arguments at that time.

16.   In view of the foregoing, Examiner maintains that the claims are either anticipated by or

are obvious in light of the cited prior art.

Claim Objections

17.   Claim 1 is objected to because of the following informalities: in lines 20-21, "a the at

least one connection" should be "the at least one connection". Appropriate correction is

required.

18.   Claim 2 is objected to because of the following informalities: in line 14, "the

communications setting" should be "the at least one connection setting". Appropriate correction

is required.

19.   Claim 5 is objected to because of the following informalities: in line 14, "a the at least

one connection" should be "the at least one connection". Appropriate correction is required.

Claim Rejections - 35 USC § 112

20.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

21.   Claims 5, 15, 17, and 27 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

22.   Claim 5 recites: "the plurality of digital subscriber line connections each having a one-to-

one correspondence with one of the parameter sets". Claim 1, which claim 5 depends upon,

recites: "establishing a plurality of digital subscriber line connections each having a one-to-one

correspondence with one of the plurality of parameters". It is unclear how there can be a one-to-

one correspondence between each connection and a single parameter, as recited in claim 1, when

each connection is tied to a "parameter set" as taught in claim 5, where a "parameter set"

contains multiple parameters. In order to overcome this rejection, Applicant should either amend

claims 1-4 to allow the term "parameter" to include "parameter set" or amend claim 5 to recite

that the method further comprises correlating additional parameters to each connection where

these additional parameters form the "parameter set".

23.   Claims 15 and 27 recite: "transmitting a plurality of parameters comprises consecutively

transmitting the plurality of parameters, each parameter transmitted after establishing a

corresponding one of the connections" (or its equivalent). Claims 6 and 18, which claims 15 and

27 depend upon, respectively, recite: "transmitting a plurality of parameters" and "establishing a

plurality of digital subscriber line connections with the communications device, each connection

corresponding with a particular one of the parameters". By having the "establishing" step recite

that "each connection correspond[s] with a particular one of the parameters", the "establishing"

step implies that the "transmitting" step occurs before the "establishing" step because otherwise

the device will not know whether each connection corresponds with a particular one of the

parameters. In addition, these limitations claim the "training" or "train-up" processes referred to in the Specification "where DSLAM 30 transmits certain parameters associated with DSL chip 54 . . . to establish a connection." Specification, p. 13, lines 8-15. Since the parameters are required to establish a connection, the Specification requires that the transmitting step occur before the establishing step. Thus, it is unclear how the parameters can be transmitted after establishment of the connections if the parameters must be transmitted before establishment of the connections.

24.   Claim 17 recites: "wherein the establishments of digital subscriber line connections are attempted establishments". Webster's Collegiate Dictionary defines "establishment" as "the state of being established" where "establish" is defined as "to bring into existence; set up". Thus, the phrase "establishing a plurality of digital subscriber line connections" can only refer to connections that are actually set up. Webster's Collegiate Dictionary defines "attempt" as "to make an effort to do, accomplish, solve, or effect". Thus, the term "attempted establishments" includes both actual establishments and endeavors at establishment that failed. Examiner assumes that Applicant is limiting the "establishments" by the foregoing limitation; however, it is unclear how Applicant can limit the term "establishment" by broadening it to include both actual establishments and endeavors at establishment that failed. For purposes of prior art rejections, Examiner will interpret the foregoing limitation as "wherein the establishments of digital subscriber line connections have failed."

Claim Rejections - 35 USC § 102

25.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

26.   Claims 6, 12, 18, 23, 24, 30, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Lund (USPN 7,006,452), of record.

27.   Regarding claims 6, 18, and 31, Lund discloses a method and system for establishing a communications connection, the method comprising the steps of and the system comprising means for: transmitting, by a digital subscriber line access multiplexer to a communications device (col. 4, lines 10-14, where the DSLAM performs the detection process), a plurality of parameters each representing a different indication of a same feature of the digital subscriber line access multiplexer and correlated with one or more communications settings (col. 6, lines 20-27, where the DSLAM transmits a plurality of initiated protocol messages, i.e. a plurality of parameters, representing a protocol, i.e. a different indication of a same feature of the DSLAM, and col. 1, lines 25-57, where the protocol is correlated with one or more communication settings); establishing a plurality of digital subscriber line connections with the communications device, each connection corresponding with a particular one of the parameters (col. 6, lines 20-27, where the testing of the DSL link, as broadly defined, "establish[es] a connection" because the CPE responds back); selecting one of the connections as meeting a predetermined criteria (col. 6, lines 20-27, where the "predetermined criteria" is a connection yielding a "correct response"); identifying the parameter that corresponds to the selected connection (col. 6, lines 20-27, where to determine if a response is correct, the DSLAM needs to know to what message the response is responding to, i.e. the DSLAM identifies the message that corresponds to the

selected connection); and establishing a digital subscriber line connection with the

communications device using at least one communications setting correlated with the identified

parameter (col. 3, lines 3-10, where the settings related to the protocol of the initiated protocol

message are used to establish a connection).

28.   Regarding claims 12 and 24, Lund discloses that selecting one of the connections

comprises selecting one of the connections having the highest signal to noise ratio that is within a

predetermined range (col. 6, lines 20-27, where a connection that is capable of communication

will inherently have the highest SNR with respect to other connections that are not capable of

communication).

29.   Regarding claim 23, Lund discloses that the program is operable to select one of the

connections having the fastest data transfer rate as meeting the predetermined criteria (col. 6,

lines 20-27, where a connection that is capable of communication will inherently have the fastest

data transfer rate with respect to other connections that are not capable of communication).

30.   Regarding claim 30, Lund inherently discloses that the program is implemented as a part

of the integrated circuit chip (col. 2, line 51-col. 3, line 2, where Lund discloses that the program

is implemented upon any known hardware, and where an IC chip is well known hardware).

Claim Rejections - 35 USC § 103

31.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

32.   Claims 1, 2, 7-9, 16, 19-21, and 28 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Lund (USPN 7,006,452), of record, in view of Applicant's Admitted Prior Art.

33.   Regarding claim 1, 7, and 19, Lund discloses a method for establishing a communications

connection, comprising: providing a digital subscriber line access multiplexer having an

integrated circuit chip, the integrated circuit chip operable to form a digital subscriber line

connection with a communications device (col. 2, lines 51-col. 3, line 3, where any type of

hardware is used to implement the computer program and where integrated circuit chips are

notorious hardware devices, and col. 1, lines 26-32, where the DSLAM establishes a connection

with a user); consecutively transmitting a plurality of parameters by the digital subscriber line

access multiplexer to the communications device, each parameter correlated with at least one

connection setting (col. 6, lines 20-27, where the DSLAM transmits a plurality of initiated

protocol messages, i.e. a plurality of parameters, representing a protocol, i.e. a different

indication of a same feature of the DSLAM, and col. 1, lines 25-57, where the protocol is

correlated with one or more communication settings); establishing a plurality of digital

subscriber line connections each having a one-to-one correspondence with the each parameter,

wherein each connection is established in response to transmitting the each parameter using the

at least one connection setting correlated with the each parameter (col. 6, lines 20-27, where the

testing of the DSL link, as broadly defined, "establish[es] a connection" because the CPE

responds back); selecting one of the connections as having a data transfer rate that is greater than

a particular threshold (col. 6, lines 20-27, where the connection permitting communication is

selected, i.e. a connection having a data transfer rate that is greater than zero is selected);

identifying one of the parameters that corresponds to the selected connection (col. 6, lines 20-27,

where to determine if a response is correct, the DSLAM needs to know to what message the response is responding to, i.e. the DSLAM identifies the message that corresponds to the selected connection); and initiating, by the digital subscriber line access multiplexer, an establishment of the digital subscriber line connection with the communications device using a communications setting correlated with the identified parameter (col. 3, lines 3-10, where the settings related to the protocol of the initiated protocol message are used to establish a connection).

Lund does not expressly disclose that each parameter identifies a particular party as a manufacturer of the integrated circuit chip. Applicant teaches as prior art having a device identify its manufacturer as part of the initialization process to decrease interoperability problems (p. 2, lines 20-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have each parameter identify a particular party as a manufacturer of the integrated circuit chip to decrease interoperability problems.

34.   Regarding claims 2, 16, and 28, Lund does not expressly disclose that the communications device is a first communications device belonging to a category, and further comprising: correlating the identified one of the parameters with the category; terminating the digital subscriber line connection with the first communications device; receiving a request to form a new digital subscriber line connection with a second communications device, the second communications device belonging to the category; determining that the second communications device belongs to the category; and in response to the determination that the second communications device belongs to the category, establishing the new digital subscriber line connection with the second communications device using the communications setting correlated with the identified one of the parameters. Applicant teaches as prior art having a device identify

its manufacturer as part of the initialization process to decrease interoperability problems (p. 2,

lines 20-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time

of the invention to have the communications device be a first communications device belonging

to a category, and further comprising: correlating the identified one of the parameters with the

category; terminating the digital subscriber line connection with the first communications device;

receiving a request to form a new digital subscriber line connection with a second

communications device, the second communications device belonging to the category;

determining that the second communications device belongs to the category; and in response to

the determination that the second communications device belongs to the category, establishing

the new digital subscriber line connection with the second communications device using the

communications setting correlated with the identified one of the parameters since this will ensure

that all devices belonging to the same category can quickly establish communication.

35.   Regarding claims 8 and 20, Lund discloses that an integrated circuit chip is operable to

establish the plurality of digital subscriber line connections (col. 2, lines 51-col. 3, line 3, where

any type of hardware is used to implement the computer program and where integrated circuit

chips are notorious hardware devices, and col. 1, lines 26-32, where the DSLAM establishes a

connection with a user). Lund does not expressly disclose that the same feature is a model

identifier of an integrated circuit chip in the digital subscriber line access multiplexer. However,

Lund does disclose that updates to a DSLAM will result in a new matching process (col. 1, lines

62-65, see also col. 5, lines 38-54). Applicant teaches as prior art having a device identify its

manufacturer as part of the initialization process to decrease interoperability problems (p. 2, lines

20-30). Therefore, it would have been obvious to one of ordinary skill in the art at the time of

the invention to have the same feature be a model identifier of an integrated circuit chip in the

DSLAM to decrease interoperability problems by allowing the devices to quickly determine

which protocols a given chip will support.

36.   Regarding claims 9 and 21, Lund discloses that an integrated circuit chip is operable to

establish the plurality of digital subscriber line connections (col. 2, lines 51-col. 3, line 3, where

any type of hardware is used to implement the computer program and where integrated circuit

chips are notorious hardware devices, and col. 1, lines 26-32, where the DSLAM establishes a

connection with a user). Lund does not expressly disclose that the same feature is a particular

version of ANSI T1.413 to which an integrated circuit chip in the digital subscriber line access

multiplexer complies. However, Lund does disclose that updates to a DSLAM will result in a

new matching process (col. 1, lines 62-65, see also col. 5, lines 38-54). Applicant teaches as

prior art having a device identify its manufacturer as part of the initialization process to decrease

interoperability problems (p. 2, lines 20-30). Examiner takes official notice that ANSI T1.413 is

a well-known industry standard. Therefore, it would have been obvious to one of ordinary skill

in the art at the time of the invention to have the same feature be a particular version of ANSI

T1.413 to decrease interoperability problems by allowing the devices to quickly determine which

protocols a given chip will support.

37.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lund (USPN

7,006,452), of record, in view of Applicant's admitted prior art as applied to claim 1 above, and

further in view of Christensen et al. (USPN 7,035,249), of record.

38.   Regarding claim 3, Lund does not expressly disclose selecting a connection having a

signal to noise ration that is within a predetermined range. Christensen teaches, in a DSL

environment, having a DSLAM monitor the SNR on a connection to determine if the SNR is so poor as to require re-initialization (col. 3, lines 21-22, where SNR is measured, and col. 3, lines 46-54, where the DSLAM measures the connection to determine if conditions are so poor as to require re-initialization). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to select a connection with an SNR that is within a given range to ensure that the connection will have a quality sufficient to sustain communication.

39.   Claims 11, 13, 14, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lund (USPN 7,006,452), of record, as applied to claims 6 and 18 above, and further in view of Christensen et al. (USPN 7,035,249), of record.

40.   Regarding claim 11, Lund discloses that selecting one of the connections comprises selecting one of the connections having the fastest data transfer rate while having a signal to noise ratio (col. 6, lines 20-27, where a connection that is capable of communication will inherently have the fastest data transfer rate with respect to other connections that are not capable of communication and will inherently have an SNR). Lund does not expressly disclose selecting a connection with a SNR that is not less than a given amount. Christensen teaches, in a DSL environment, having a DSLAM monitor the SNR on a connection to determine if the SNR is so poor as to require re-initialization (col. 3, lines 21-22, where SNR is measured, and col. 3, lines 46-54, where the DSLAM measures the connection to determine if conditions are so poor as to require re-initialization). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to select a connection with an SNR that is not less than a given amount to ensure that the connection will have a quality sufficient to sustain communication.

Lund in view of Christensen does not expressly disclose that the signal to noise ratio is no less than six decibels; however, Lund in view of Christensen does disclose requiring that a connection have a sufficient SNR (Christensen: col. 3, lines 46-54, where the DSLAM measures the connection to determine if conditions are so poor as to require re-initialization). It is generally considered to be within the ordinary skill in the art to adjust, vary, select or optimize the numerical parameters or values of any system absent a showing of criticality in a particular recited value. The burden of showing criticality is on Applicant. In re Mason, 87 F.2d 370, 32 USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471 (1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955); In re Saether, 492 F.2d 849, 181 USPQ 36 (CCPA 1974); In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Since Lund in view of Christensen discloses ensuring that a connection has a sufficient SNR, it would have been obvious to one of ordinary skill in the art at the time of the invention to require a connection to have a particular SNR, including no less that six decibels, absent a showing a criticality by Applicant.

41.   Regarding claims 13 and 25, Lund discloses that selecting one of the connections comprises selecting one of the connections having a data transfer rate that is equal to or greater than a minimum data transfer rate (col. 6, lines 20-27, where a connection that is capable of communication will have a data transfer rate that is greater than a minimum data transfer rate and will have an SNR). Lund does not expressly disclose selecting a connection with a SNR that is in a given range. Christensen teaches, in a DSL environment, having a DSLAM monitor the SNR on a connection to determine if the SNR is so poor as to require re-initialization (col. 3,

lines 21-22, where SNR is measured, and col. 3, lines 46-54, where the DSLAM measures the

connection to determine if conditions are so poor as to require re-initialization). Therefore, it

would have been obvious to one of ordinary skill in the art at the time of the invention to select a

connection with an SNR that is within a given range to ensure that the connection will have a

quality sufficient to sustain communication.

Lund in view of Christensen does not expressly disclose that the signal to noise ratio is

within zero to nine decibels; however, Lund in view of Christensen does disclose requiring that a

connection have a sufficient SNR (Christensen: col. 3, lines 46-54, where the DSLAM measures

the connection to determine if conditions are so poor as to require re-initialization). It is

generally considered to be within the ordinary skill in the art to adjust, vary, select or optimize

the numerical parameters or values of any system absent a showing of criticality in a particular

recited value. The burden of showing criticality is on Applicant. In re Mason, 87 F.2d 370, 32

USPQ 242 (CCPA 1937); Marconi Wireless Telegraph Co. v. U.S., 320 U.S. 1, 57 USPQ 471

(1943); In re Schneider, 148 F.2d 108, 65 USPQ 129 (CCPA 1945); In re Aller, 220 F.2d 454,

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Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977); In re Boesch, 617 F.2d 272, 205 USPQ 215

(CCPA 1980). Since Lund in view of Christensen discloses ensuring that a connection has a

sufficient SNR, it would have been obvious to one of ordinary skill in the art at the time of the

invention to have any SNR, including between zero and nine decibels, absent a showing a

criticality by Applicant.

42.   Regarding claims 14 and 26, Lund does not expressly disclose receiving an indication

that a previously established digital subscriber line connection between the communications

device and the digital subscriber line access multiplexer is unsatisfactory; and wherein the

plurality of parameters are transmitted in response to receiving the indication. However, Lund

does disclose re-initializing a connection after certain events, such as power-down (col. 5, line

63-col. 6, line 6). Christensen teaches, in a DSL environment, monitoring the conditions on a

connection to determine if the conditions are so poor as to require re-initialization (col. 3, lines

46-54). This ensures that the connection will operate with ideal parameters even if conditions

change (col. 1, lines 26-28, where conditions change, and col. 2, lines 48-50, where the

connection is re-initialized to ensure that the connection has ideal parameters for a given set of

conditions). Therefore, it would have been obvious to one of ordinary skill in the art at the time

of the invention to receive an indication that a previously established digital subscriber line

connection between the communications device and the digital subscriber line access multiplexer

is unsatisfactory and, in response, to transmit the plurality of parameters since this ensures that

the parameters on the connection are ideal for a given set of conditions.

Allowable Subject Matter

43.   Claims 4, 10, and 22 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims. The prior art does not disclose or fairly suggest that each

parameter is transmitted as a part of a particular C-MSGS1 message. Rather, Lund discloses that

each message is part of a particular protocol being tested (col. 6, lines 20-27).

44.   Claim 17 would be allowable if rewritten to overcome the rejection(s) under 35

U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of

the base claim and any intervening claims. The prior art does not disclose or fairly suggest that establishing a safety DSL connection using the claimed set of safety parameters.

45.   Claim 29 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose or fairly suggest that establishing a safety DSL connection using the claimed set of safety parameters.

Conclusion

46.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McElroy et al. (USPN 7,093,289) see entire document which pertains to configuring DSL devices. Hagler et al. (USPN 7,012,899) see entire document which pertains to auto-configuring a DSL modem.

47.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL J. RYMAN whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571)272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel J. Ryman
Primary Examiner
Art Unit 2616

/Daniel J. Ryman/
Primary Examiner, Art Unit 2616